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| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--|----------------|----------------------|-------------------------|------------------|
| 09/693,511   | 10/20/2000     | Joel E. Short        | 42253/205408            | 7936             |
| 826  | 7590 07/09/200 |                      | EXAMINER                |                  |
| ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 |                |                      | DUONG, THOMAS           |                  |
|  |                |                      | ART UNIT                | PAPER NUMBER     |
| CHARLOTTE, NC 28280-4000   |                |                      | 2143                    | 9                |
|  |                |                      | DATE MAILED: 07/09/2004 | , /              |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No   | Applicant(s)   |  |  |  |
|--|--|--|--|--|--|
|  | 09/693,511   | SHORT ET AL.   |  |  |  |
| Office Action Summary  | Examiner   | Art Unit   |  |  |  |
|  | Thomas Duong   | 2143   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c   | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | i6(a). In no event, however, may a reply be time<br>within the statutory minimum of thirty (30) days<br>ill apply and will expire SIX (6) MONTHS from<br>cause the application to become ABANDONEI | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 19 Ap   | <u>oril 2004</u> .   |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)□ This   | ☐ This action is FINAL. 2b)☐ This action is non-final.   |  |  |  |  |
| 3) Since this application is in condition for alloward   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |  |  |  |  |
| Disposition of Claims  |  |  |  |  |  |
| 4)   | vn from consideration.   |  |  |  |  |
| Application Papers   |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner 10)☒ The drawing(s) filed on 19 April 2004 is/are: a)☐ Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correction 11)☐ The oath or declaration is objected to by the Ex  | ☑ accepted or b)☐ objected to be drawing(s) be held in abeyance. See on is required if the drawing(s) is obj   | e 37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d).  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  |  |  |  |  |  |
| Attachment(s)  |  |  |  |  |  |
| Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:   | ite<br>atent Application (PTO-152)   |  |  |  |
| S Patent and Trademark Office  |  |  |  |  |  |

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#### **DETAILED ACTION**

### Response to Amendment

This office action is in response to the amendment filed on April 19, 2004 (Paper No. 7).
 The amendment filed on April 19, 2004 has been entered and made of record. Claims 1, 3-11, 13-16, 18 and 20-23 are presented for further consideration and examination.

## Response to Argument

- 2. The Applicants' arguments and amendments filed on April 19, 2004 have been fully considered, but they are not persuasive.
- 3. With regard to *claims 1, 7 and 18*, the Applicants point out that:
  - The `429 Ames Patent Does Not Teach or Suggest the Identification of the Connection Port of Multiple Hosts at the Access Concentrator

However, the Examiner finds that the Applicants' arguments are not persuasive because this does not commensurate with the amended claims. Therefore, the Examiner maintains that the Ames reference does disclose,

Ames (US006058429) teaches,

a processor that communicates with an access concentrator to receive one or
more port identifier[s] assigned by the access concentrator and each port
identifier is associated with a location-specific connection port of one or more
host[s], the processor further determines one or more location-specific
connection port[s] currently accessing the network by associating the one or
more received port identifier[s] with one or more connection port[s]; and (Ames,

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col.3, lines 19-27, lines 49-55; module 200, fig.2; Ames teaches of a learning switch (a processor) equipped with a learning mechanism that inspects packets sent between the router and the communicating devices (hosts) through the switch (access concentrator) and stores data indicating the port location of each device based on information contained in the packets)

In summary, the Examiner maintains that Ames does teach of a device that is equipped with a learning mechanism that inspects packets sent between the router and the communicating devices through the switch and stores data indicating the port location of each device based on information contained in the packets.

Therefore, the Applicants still failed to clearly disclose the novelty of the invention and identify specific limitation, which would define patentable distinction over prior art.

- 4. With regard to *claims 1, 7 and 18*, the Applicants point out that:
  - The `429 Ames Patent Does Not or Suggest a Simplified Network Approach that
     Eliminates Multiple Access Concentrator Switches

However, the Examiner finds that the Applicants' arguments are not persuasive because this does not commensurate with the amended claims.

- 5. With regard to *claims 1, 7 and 18*, the Applicants point out that:
  - The '429 Ames Patent Does Not Teach How the Network Gateway Device Uses the Port-Identifying Information to Determine the Network Authorization of the Port or to Rely on This Information to Execute an Ancillary Network Application However, the Examiner finds that the Applicants' arguments are not persuasive because this does not commensurate with the amended claims. Therefore, the Examiner maintains that the Ames reference does disclose,

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Ames (US006058429) teaches,

a database associated with the network gateway device that stores the one or more location-specific connection port[s] for the purpose of identifying one or more host[s] associated with the connection port that have been granted network authorization. (Ames, col.3, lines 19-27, lines 49-55; col.11, lines 42-44; module 200, fig.2; Ames teaches of a learning switch (a processor) equipped with a learning mechanism that inspects packets sent between the router and the communicating devices (hosts) through the switch (access concentrator) and stores data indicating the port location of each device based on information contained in the packets)

In summary, the Examiner maintains that Ames does teach of a device that is equipped with a learning mechanism that inspects packets sent between the router and the communicating devices through the switch and stores data indicating the port location of each device based on information contained in the packets.

Therefore, the Applicants still failed to clearly disclose the novelty of the invention and identify specific limitation, which would define patentable distinction over prior art.

6. With regard to <u>claims 3-6, 8-11, 13-16 and 20-23</u>, they are rejected at least by virtual of their dependency on the independent claims and by other reasons set forth in the previous office action (Paper No. 7). Accordingly, rejections for <u>claims 3-6, 8-11, 13-16</u> and 20-23 are presented as below:

Claim Rejections - 35 USC § 102

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- 7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 8. <u>Claims 1, 3, 7,12-15 and 17-23</u> are rejected under 35 U.S.C. 102(e) as being anticipated by Ames et al. (US006058429A).
- 9. With regard to *claims 1, 7, 12-15 and 18-23*, Ames reference discloses,
  - a processor (learning switch 200) that communicates with an access
    concentrator (local switch 134, 136 or 138) to determine connection ports of
    host-generated (local clients or servers) data packets; and (Ames, col.3, lines 1927, lines 49-55; module 200 on sheet 2, fig.2).
  - a database (learning switch) that stores the connection port for the purpose of identifying connection ports within a network that have been granted network authorization (Ames, col.3, lines 19-27; col.11, lines 42-44; module 200 on sheet 2, fig.2).
- With regard to <u>claim 3</u>, Ames reference discloses the invention substantially as claimed,
   See <u>claim 1</u> rejection as detailed above.

Furthermore, Ames reference discloses,

- wherein the processor uses VLAN protocol as a communication link between the processor and the access concentrator (Ames, col.4, lines 52-65; modules 102, 110 or 118 on sheet 2, fig.2).
- With regard to <u>claim 17</u>, Ames reference discloses the invention substantially as claimed,

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See claim 7 rejection as detailed above.

Furthermore, Ames reference discloses,

wherein the network device further comprises a gateway device that provides
 subscribers network access (Ames, module 126 on sheet 2, fig.2).

## Claim Rejections - 35 USC § 103

- 12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 13. <u>Claims 2, 8-11 and 16</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames (US006058429A) and in view of Pitcher et al. (US006370142B1).
- With regard to <u>claims 2 and 8-9</u>, Ames reference discloses the invention substantially as claimed,

See claim 1 and 7 rejections as detailed above.

However, Ames reference does not explicitly disclose,

- wherein the processor reads an identifier within a tagged portion of the data packet to determine connection ports of host generated data packets
   Pitcher teaches,
- wherein the processor reads an identifier within a tagged portion of the data packet to determine connection ports of host generated data packets (Pitcher, col. 13, lines 49-58; col.14, lines 10-20)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Pitcher reference with Ames reference to conserve additional bandwidth by eliminating the exposure of uninterested traffic to certain stations (Pitcher, col.3, lines 43-46).

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15. With regard to <u>claims 10-11 and 16</u>, Ames and Pitcher references disclose the invention substantially as claimed,

See claims 8 and 13 rejections as detailed above.

Furthermore, Pitcher reference discloses,

wherein tagging the data packets with a port identifier further comprises tagging
the packets with a port identifier that corresponds to a media access control
(MAC) address (Pitcher, col. 13, lines 49-58; col.14, lines 10-20; col.15, lines 1722; col.17, lines 35-39)

Furthermore, Ames reference discloses,

- wherein tagging the data packets with a port identifier includes implementing the use of VLAN protocol (Ames, col.4, lines 52-65; modules 102, 110 or 118 on sheet 2, fig.2).
- 16. <u>Claims 4-6</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames (US006058429A) and in view of Hunt et al. (US006539422B1).
- 17. With regard to <u>claims 4-6</u>, Ames reference discloses the invention substantially as claimed,

See *claim 1* rejection as detailed above.

However, Ames reference does not explicitly disclose,

- wherein the processor further comprises a querying agent capable of requesting identification data related to the connection port of host-generated data packets
- wherein the querying agent uses Simple Network Management Protocol (SNMP)
   as the communication link between the network device and the access
   concentrator

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 wherein the querying agent uses Extensible markup Language (XML) as the communication link between the network device and the access concentrator
 Hunt teaches,

- wherein the processor further comprises a querying agent capable of requesting identification data related to the connection port of host-generated data packets (Hunt, abstract, lines 9-14; col.5, lines 46-52; col.15, lines 57-63; modules 211-212 on sheet 2, fig.2; modules 905-906 on sheet 9, fig. 9A).
- wherein the querying agent uses Simple Network Management Protocol (SNMP)
  as the communication link between the network device and the access
  concentrator (Hunt, abstract, lines 9-14; col.5, lines 46-52; col.15, lines 57-63;
  modules 211-212 on sheet 2, fig.2; modules 905-906 on sheet 9, fig. 9A).
- wherein the querying agent uses Extensible markup Language (XML) as the communication link between the network device and the access concentrator (Hunt, abstract, lines 9-14; col.15, lines 39-43; module 231 on sheet 2, fig.2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Hunt reference with Ames reference to actively check the status of the network by monitoring various devices on the network (hubs, routers, bridges, etc.). Furthermore, the SNMP protocol allows network administrator to manage and be notified in case of a problem in the network.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 703/305-1886. The examiner can normally be reached on M-F 7:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703/308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are 703/872-9306 for regular communications and 703/872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/305-3900.

Thomas Duong (AU2143)

July 7, 2004

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100